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DATE: Sunday, September 03, 2006

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	<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L5	((("6660471" "6750009" "6943246")!.PN.) .p63-p142.	3
<input type="checkbox"/>	L4	L3	13
	<i>DB=PGPB,USPT,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L3	L1 and mutant	92
<input type="checkbox"/>	L2	L1 and transactivator	6
<input type="checkbox"/>	L1	HCV adj replicon	325

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=> file caplus biosis

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FILE 'CAPLUS' ENTERED AT 18:01:31 ON 03 SEP 2006

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FILE 'BIOSIS' ENTERED AT 18:01:31 ON 03 SEP 2006

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=> HCV (s) replicon

L1 809 HCV (S) REPLICON

=> transactivation

L2 24813 TRANSACTIVATION

=> L2 and l1

L3 10 L2 AND L1

=> Tat and L3

L4 0 TAT AND L3

=> subgenomic (l) HCV

L5 495 SUBGENOMIC (L) HCV

=> replicon and L5

L6 419 REPLICON AND L5

=> T7 and L6

L7 4 T7 AND L6

=> Tat and L6

L8 6 TAT AND L6

=> D L6 IBBIB ABS 1-6

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REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):IBIB

L6 ANSWER 1 OF 419 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:889281 CAPLUS

TITLE: Replication of HCV subgenomic
replicons in two new cell lines

AUTHOR(S): Wu, Gang; Wu, Ying-song; Dong, Wen-qi; Chen, Bai-hong;
Li, Ming

CORPORATE SOURCE: Coll. Biotechnol., Southern Med. Univ., Guangzhou,
510515, Peop. Rep. China

SOURCE: Redai Yixue Zazhi (2006), 6(5), 514-517, C3, C2
CODEN: RYZEAI; ISSN: 1672-3619

PUBLISHER: Guangdong Redai Yixue Zazhishe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

L6 ANSWER 2 OF 419 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:874383 CAPLUS

TITLE: Improved replicon cellular activity of
non-nucleoside allosteric inhibitors of HCV NS5B
polymerase: From benzimidazole to indole scaffolds

AUTHOR(S): Beaulieu, Pierre L.; Gillard, James; Bykowski, Darren;
Brochu, Christian; Dansereau, Nathalie; Duceppe,
Jean-Simon; Hache, Bruno; Jakalian, Araz; Lagace,
Lisette; LaPlante, Steven; McKercher, Ginette; Moreau,
Elaine; Perreault, Stephane; Stammers, Timothy;
Thauvette, Louise; Warrington, Jeff; Kukolj, George

CORPORATE SOURCE: Research and Development, Boehringer Ingelheim
(Canada) Ltd., 2100 Cunard Street, Laval (Quebec), H7S
2G5, Can.

SOURCE: Bioorganic & Medicinal Chemistry Letters (2006),
16(19), 4987-4993

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

L6 ANSWER 3 OF 419 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:861726 CAPLUS

TITLE: HepDirect- prodrugs of 2'-methyladenosine for
liver-targeted therapy of hepatitis C

AUTHOR(S): Hecker, Scott J.; Reddy, K. Raja; van Poelje, Paul D.;
Sun, Zhili; Mali, V. Reddy; Huang, Wenjian;
Varkhedkar, Vaibhav; Fujitaki, James; Insko, Michael;
Krutil, Douglas; Chi, Bert; Olsen, David B.;
Koeplinger, Kenneth A.; Boyer, Serge H.; Linemeyer,
David; MacCoss, Malcolm; Erion, Mark D.

CORPORATE SOURCE: Department of Medicinal Chemistry, Metabasis
Therapeutics, Inc, La Jolla, CA, 92037, USA

SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San
Francisco, CA, United States, Sept. 10-14, 2006 (2006)
, MEDI-271. American Chemical Society: Washington, D.
C.

CODEN: 69IHRD

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

L6 ANSWER 4 OF 419 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:861696 CAPLUS

TITLE: Synthesis and structure-activity relationship studies
of benzimidazole and related compounds as hepatitis C
virus NS5B RNA-dependent RNA polymerase inhibitors

AUTHOR(S): Oka, Takahiro; Hirashima, Shintaro; Ikegashira,
Kazutaka; Noji, Satoru; Yamanaka, Hiroshi; Hara,
Yoshinori; Ishida, Tomio; Suzuki, Takayoshi; Yata,
Shinji; Ando, Izuru; Ikeda, Satoru; Hashimoto,
Hiromasa

CORPORATE SOURCE: Central Pharmaceutical Research Institute, Japan
Tobacco Inc, Takatsuki, Osaka, N/A, Japan

SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San
Francisco, CA, United States, Sept. 10-14, 2006 (2006)
, MEDI-241. American Chemical Society: Washington, D.
C.

CODEN: 69IHRD

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

L6 ANSWER 5 OF 419 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:861695 CAPLUS

TITLE: Discovery of VP19744: A pyrano[3,4-b]indole-based
inhibitor of HCV NS5B polymerase demonstrating in vivo

antiviral activity
AUTHOR(S): LaPorte, Matthew G.; Jackson, Randy W.; Burns, Christopher J.; Draper, Tandy L.; Gaboury, Janet A.; Galie, Kristin; Herbertz, Torsten; Hussey, Alison R.; Rippin, Susan R.; Benetatos, Christopher A.; Chunduru, Srinivas K.; Young, Dorothy C.; Christiansen, Joel S.; Coburn, Glen A.; Rizzo, Christopher J.; Collett, Marc S.; Pevear, Daniel C.; Condon, Stephen M.
CORPORATE SOURCE: Department of Medicinal Chemistry, ViroPharma Inc, Exton, PA, 19341, USA
SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006 (2006), MEDI-240. American Chemical Society: Washington, D. C.
CODEN: 69IHRD
DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)
LANGUAGE: English

L6 ANSWER 6 OF 419 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:856575 CAPLUS

TITLE: Bleomycin is a potent small molecule inhibitor of hepatitis C virus replication

AUTHOR(S): Rakic, Bojana; Brulotte, Marc; Pezacki, John Paul

CORPORATE SOURCE: The Steacie Institute for Molecular Sciences, National Research Council Canada/ University of Ottawa, Ottawa, ON, K1A 0R6, Can.

SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006 (2006), BIOL-094. American Chemical Society: Washington, D. C.

CODEN: 69IHRD

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

=> D L7 IBIB ABS 1-4

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:889281 CAPLUS

TITLE: Replication of HCV subgenomic replicons in two new cell lines

AUTHOR(S): Wu, Gang; Wu, Ying-song; Dong, Wen-qi; Chen, Bai-hong; Li, Ming

CORPORATE SOURCE: Coll. Biotechnol., Southern Med. Univ., Guangzhou, 510515, Peop. Rep. China

SOURCE: Redai Yixue Zazhi (2006), 6(5), 514-517, C3, C2

CODEN: RYZEAI; ISSN: 1672-3619

PUBLISHER: Guangdong Redai Yixue Zazhishe

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB Objective: HCV is a major leading cause of chronic liver diseases. Very little is known about HCV until the HCV virus was cloned in 1989. The major obstacles in the study HCV are (1) the virus particles are not frequently found in the blood and hepatobiopsy samples, (2) lack of a robust culture system and (3) lack of a convenient small animal model. The great progress in the field of in vitro HCV culture was the establishment of the selectable subgenomic replicon system in 1999. The system provides a platform to study the replication mechanism of the virus, the relationship between the virus and its host cells, and the metabolic characteristic of enzymes encoded by HCV. The system is also useful for scanning of new compds. against HCV. However the system is restricted to use in only a few cell lines such as Huh7, 293, Hela and Hepa1-6. Another drawback is the lack of structural genes in the replicon so it produces no virus particles. Thus it is desirable to have an improved replicon system. But it is uncertain that the replicon-sustained cell lines now existing have the cellular condition favorable for virus particles assembly and secretion, so we first screened for more replicon-sustained cells. Methods: The plasmid pNNeo3-5B comprises replicon cDNA of HCV-N. This replicon RNA has previously been proved to have the ability to replicate in Huh7. Deleting pNNeo3-SB BsaB I -Hpa I segment, which covers the NS5B GDD motif, resulted in a replicate-deficient replicon plasmid pNNeo3- 5B(A). After digestion with Xba I , the two plasmids were transcribed with T7 RNA polymerase to produce rNNeo3-5B and rNNeo3-5B (A). A panel of mammalian cell lines including Huh7, SMMC7721, HepG2, BEL7402, Lo2, CBRH7919, BHK_, Vero E6, 293 and 293T were electroporated with rNNeo3-5B, followed by feeding the medium with G418 at 800 μ g/mL. Results: After three weeks, cell clones were found only in CBRH7919 and BHK21. Electroporating of cells with rNNeo3-5B(.DELTA.) failed to confer G418 resistance. Cells without replicon dropped off when fed with G418 at the same concn. Results from RT-PCR confirmed that the replicon RNA efficiently replicated in each clone. Conclusion: The expression of HCV NS3 and NS5A proteins was validated by immunofluorescence and Western blot. This work provides evidence that CBRH7919 and BHK21 cells can sustain HCV replicon, therefore they are potential hosts for HCV particles.

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:315056 CAPLUS

DOCUMENT NUMBER: 145:4018
TITLE: Inhibition of hepatitis C virus RNA replication by
short hairpin RNA synthesized by T7 RNA
polymerase in hepatitis C virus subgenomic
replicons
AUTHOR(S): Hamazaki, Hiroyuki; Ujino, Saneyuki; Miyano-Kurosaki,
Naoko; Shimotohno, Kunitada; Takaku, Hiroshi
CORPORATE SOURCE: Department of Life and Environmental Sciences, Chiba
Institute of Technology, 2-17-1 Tsudanuma, Narashino,
Chiba, 275-0016, Japan
SOURCE: Biochemical and Biophysical Research Communications
(2006), 343(3), 988-994
CODEN: BBRCA9; ISSN: 0006-291X

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB RNA interference (RNAi) is a cellular process that induces gene silencing by which small duplexes of RNA specifically target a homologous sequence for cleavage by cellular RNases. Here, to test the RNAi method for blocking hepatitis C virus (HCV) RNA replication, we created four short hairpin RNAs (shRNAs) targeting the HCV internal ribosome entry site/Core gene transcript using T7 RNA polymerase. ShRNA suppressed the replication of HCV RNA in the HCV replicon. On the other hand, short interfering RNAs synthesized using the T7 RNA polymerase system trigger a potent induction of interferon- α and β in a variety of cells. We examined whether the shRNAs synthesized using the T7 RNA polymerase system activated double-stranded RNA-dependent protein kinase, 2'-5' oligoadenylate synthetase, or interferon-regulatory factor-3. Our results demonstrated that the T7-transcribed shRNA did not activate these proteins in Huh-7 cells and the HCV replicon. These shRNAs are a promising new strategy for anti-HCV gene therapeutics.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RECORD FORMAT

L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:407405 CAPLUS
DOCUMENT NUMBER: 139:239740
TITLE: The effect of ribavirin and IMPDH inhibitors on
hepatitis C virus subgenomic replicon RNA
AUTHOR(S): Zhou, Sifang; Liu, Rong; Baroudy, Bahige M.; Malcolm,
Bruce A.; Reyes, Gregory R.
CORPORATE SOURCE: Antiviral Therapy, Schering-Plough Research Institute,
Kenilworth, NJ, 07033, USA
SOURCE: Virology (2003), 310(2), 333-342

CODEN: VIRLAX; ISSN: 0042-6822

PUBLISHER: Elsevier Science

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The recent development of in vitro hepatitis C virus (HCV) RNA replication systems has provided useful tools for studying the intracellular anti-HCV activity of ribavirin. Ribavirin has been shown to: induce "error catastrophe" in poliovirus be a pseudo-substrate of the HCV RNA-dependent RNA polymerase (RdRp) in vitro, and increase mutations in HCV RNA in the binary T7 polymerase/HCV cDNA replication system. These findings have led to the hypothesis that ribavirin may also induce error catastrophe in HCV. However, the functional relevance of ribavirin-induced HCV RNA mutagenesis is unclear. By use of a colony formation assay, in which RNA is isolated from the HCV subgenomic replicon system following treatment, the impact of ribavirin, inosine-5'-monophosphate dehydrogenase (IMPDH) inhibitors, and the combination was assessed. Ribavirin reduced HCV replicon colony-forming efficiency (CFE) in a dose-dependent fashion, suggesting that ribavirin may be misincorporated into replicon RNA and result in an anti-replicon effect analogous to error catastrophe. This effect was markedly suppressed by addn. of exogenous guanosine. Combination treatment with ribavirin and mycophenolic acid (MPA) or VX-497, both potent, nonnucleoside IMPDH inhibitors, led to a greatly enhanced anti-replicon effect. This enhancement was reversed by inclusion of guanosine with the treatment. In contrast, MPA or VX-497 alone had only marginal effects on both the quantity and quality (CFE) of replicon RNA, suggesting that although IMPDH inhibition is an important contributing factor to the overall ribavirin anti-HCV replicon activity, IMPDH inhibition by itself is not sufficient to exert an anti-HCV effect. Sequencing data targeting the neo gene segment of the HCV replicon indicated that ribavirin together with MPA or VX-497 increased the replicon error rate by about two-fold. Taken together these results further suggest that lethal mutagenesis may be an effective anti-HCV strategy. The colony formation assay provides a useful tool for evaluating mutagenic nucleoside analogs for HCV therapy. Finally, the data from combination treatment indicate potential therapeutic value for an enhanced anti-HCV effect when using ribavirin in combination with IMPDH inhibition.

REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:303187 BIOSIS

DOCUMENT NUMBER: PREV200300303187

TITLE: The effect of ribavirin and IMPDH inhibitors on hepatitis C virus subgenomic replicon RNA.

AUTHOR(S): Zhou, Sifang; Liu, Rong; Baroudy, Bahige M.; Malcolm, Bruce A.; Reyes, Gregory R. [Reprint Author]

CORPORATE SOURCE: Infectious Diseases and Oncology, Schering-Plough Research Institute, 2015 Galloping Hill Road, Kenilworth, NJ, 07033, USA

gregory.reyes@spcorp.com

SOURCE: Virology, (June 5 2003) Vol. 310, No. 2, pp. 333-342. print.

ISSN: 0042-6822 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 2 Jul 2003

Last Updated on STN: 2 Jul 2003

AB The recent development of in vitro hepatitis C virus (HCV) RNA replication systems has provided useful tools for studying the intracellular anti-HCV activity of ribavirin. Ribavirin has been shown to: (1) induce "error catastrophe" in poliovirus (Crotty et al., 2001, Proc. Natl. Acad. Sci. USA 98, 6895-6900), (2) be a pseudo-substrate of the HCV RNA-dependent RNA polymerase (RdRp) in vitro (Maag et al., 2001, J. Biol. Chem. 276, 46094-46098), and (3) increase mutations in HCV RNA in the binary T7 polymerase/HCV cDNA replication system (Contreras et al., 2002, J. Virol. 76, 8505-8517). These findings have led to the hypothesis that ribavirin may also induce error catastrophe in HCV. However, the functional relevance of ribavirin-induced HCV RNA mutagenesis is unclear. By use of a colony formation assay, in which RNA is isolated from the HCV subgenomic replicon system following treatment, the impact of ribavirin, inosine-5'-monophosphate dehydrogenase (IMPDH) inhibitors, and the combination was assessed. Ribavirin reduced HCV replicon colony-forming efficiency (CFE) in a dose-dependent fashion, suggesting that ribavirin may be misincorporated into replicon RNA and result in an anti-replicon effect analogous to error catastrophe. This effect was markedly suppressed by addition of exogenous guanosine. Combination treatment with ribavirin and mycophenolic acid (MPA) or VX-497, both potent, nonnucleoside IMPDH inhibitors, led to a greatly enhanced anti-replicon effect. This enhancement was reversed by inclusion of guanosine with the treatment. In contrast, MPA or VX-497 alone had only marginal effects on both the quantity and quality (CFE) of replicon RNA, suggesting that although IMPDH inhibition

is an important contributing factor to the overall ribavirin anti-HCV replicon activity. IMPDH inhibition by itself is not sufficient to exert an anti-HCV effect. Sequencing data targeting the neo gene segment of the HCV replicon indicated that ribavirin together with MPA or VX-497 increased the replicon error rate by about two-fold. Taken together these results further suggest that lethal mutagenesis may be an effective anti-HCV strategy. The colony formation assay provides a useful tool for evaluating mutagenic nucleoside analogs for HCV therapy. Finally, the data from combination treatment indicate potential therapeutic value for an enhanced anti-HCV effect when using ribavirin in combination with IMPDH inhibition.

=> D L8 IBIB ABS 1-6

L8 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1017584 CAPLUS

DOCUMENT NUMBER: 143:434627

TITLE: Mutagenesis analysis of the rGTP-specific binding site of hepatitis C virus RNA-dependent RNA polymerase

AUTHOR(S): Cai, Zhaohui; Yi, MinKyung; Zhang, Chen; Luo, Guangxiang

CORPORATE SOURCE: Department of Microbiology, Immunology, and Molecular Genetics, University of Kentucky College of Medicine, Lexington, KY, 40536, USA

SOURCE: Journal of Virology (2005), 79(18), 11607-11617
CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Hepatitis C virus (HCV) nonstructural protein 5B (NS5B) is the virus-encoded RNA-dependent RNA polymerase (RdRp) essential for HCV RNA replication. An earlier crystallog. study identified a rGTP-specific binding site lying at the surface between the thumb domain and the fingertip about 30 Å away from the active site of the HCV RdRp. To det. its physiol. importance, we performed a systematic mutagenesis anal. of the rGTP-specific binding pocket by amino acid substitutions. Effects of mutations of the rGTP-specific binding site on enzymic activity were detd. by an in vitro RdRp assay, while effects of mutations on HCV RNA replication were examd. by cell colony formation, as well as by transient replication of subgenomic HCV RNAs. Results derived from these studies demonstrate that amino acid substitutions of the rGTP-specific binding pocket did not significantly affect the in vitro RdRp activity of purified recombinant NS5B proteins, as measured by their abilities to synthesize RNA on an RNA

template contg. the 3' untranslated region of HCV neg.-strand RNA. However, most mutations of the rGTP-specific binding site either impaired or completely ablated the ability of subgenomic HCV RNAs to induce cell colony formation. Likewise, these mutations caused either redn. in or lethality to transient replication of the human immunodeficiency virus Tat-expressing HCV replicon RNAs in the cell. Collectively, these findings demonstrate that the rGTP-specific binding site of the HCV NS5B is not required for in vitro RdRp activity but is important for HCV RNA replication in vivo.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES
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L8 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:761023 CAPLUS

DOCUMENT NUMBER: 144:142050

TITLE: Screening for hepatitis C virus antiviral activity
with a cell-based secreted alkaline phosphatase
reporter replicon system

AUTHOR(S): Bourne, Nigel; Pyles, Richard B.; Yi, MinKyung;
Veselenak, Ronald L.; Davis, Melissa M.; Lemon,
Stanley M.

CORPORATE SOURCE: Department of Pediatrics, Department of Micorbiology
and Immunology, University of Texas Medical Branch,
Galveston, TX, 77555-0436, USA

SOURCE: Antiviral Research (2005), 67(2), 76-82
CODEN: ARSRDR; ISSN: 0166-3542

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors describe a phased screening system for discovery of compds. with antiviral activity against hepatitis C virus (HCV). The primary assay utilizes dicistronic subgenomic HCV replicons in which the upstream cistron was modified to express the human immunodeficiency virus (HIV) tat protein. When these replicons are stably transfected into Huh-7-derived cells that express secreted alk. phosphatase (SEAP) under transcriptional control of the HIV long terminal repeat promoter, there is a strong correlation between intracellular HCV RNA abundance and the activity of SEAP secreted into the culture medium. Thus, active compds. are easily identified by direct enzymic quantification of SEAP in the medium without post-assay processing. Compds. that reduce SEAP activity without causing cellular toxicity are next evaluated in a second Huh-7-derived cell line constitutively expressing SEAP under control of the tat-HIV promoter axis, independent of HCV RNA replication. This

specificity control identifies compds. that cause redns. in SEAP that are unrelated to suppression of HCV RNA replication. Compds. showing HCV-specific activity in primary assays are next evaluated by real-time RT-PCR to directly quantify redns. in HCV RNA. The authors have found excellent agreement between the SEAP and RT-PCR assays. This phased system provides an efficient and cost-effective screen for compds. with antiviral activity against HCV.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:969892 CAPLUS

DOCUMENT NUMBER: 138:249449

TITLE: Subgenomic Hepatitis C Virus Replicons
Inducing Expression of a Secreted Enzymatic Reporter
Protein

AUTHOR(S): Yi, MinKyung; Bodola, Francis; Lemon, Stanley M.

CORPORATE SOURCE: Department of Microbiology and Immunology, The
University of Texas Medical Branch at Galveston,
Galveston, TX, 77555-1019, USA

SOURCE: Virology (2002), 304(2), 197-210

CODEN: VIRLAX; ISSN: 0042-6822

PUBLISHER: Elsevier Science

DOCUMENT TYPE: Journal

LANGUAGE: English

AB We constructed dicistronic, subgenomic hepatitis C virus (HCV) replicons in which the sequence encoding the human immunodeficiency virus (HIV) tat protein was placed in the upstream cistron, between the HCV 5'NTR and a picornaviral 2A proteinase sequence fused to the selectable marker Neo. Stably transformed Huh7 cells expressing secreted alk. phosphatase (SEAP) under transcriptional control of the HIV LTR promoter actively secreted SEAP following transfection with these replicon RNAs. Extracellular SEAP activity correlated closely with intracellular HCV RNA levels, as detd. by Northern blotting and real-time RT-PCR anal. These RNAs replicated efficiently despite the absence of core-protein-coding sequence downstream of the HCV IRES. The replication efficiency of replicons derived from the HCV-N strain of HCV was significantly greater than those derived from Con1 in transiently transfected cells. Using this reporter system, we have demonstrated significant differences in the response to interferon .alpha.-2b in cell lines contg. replicons derived from these two strains of HCV.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES
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RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 6 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
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ACCESSION NUMBER: 2005:514751 BIOSIS

DOCUMENT NUMBER: PREV200510306576

TITLE: Mutagenesis analysis of the rGTP-specific binding site of
hepatitis C virus RNA-dependent RNA polymerase.

AUTHOR(S): Cai, Zhaohui; Yi, MinKyung; Zhang, Chen; Luo, Guangxiang
[Reprint Author]

CORPORATE SOURCE: Univ Kentucky, Dept Microbiol Mol Genet and Immunol,
Coll

Med, 800 Rose St,MN477, Lexington, KY 40536 USA
gluo0@uky.edu

SOURCE: Journal of Virology, (SEP 2005) Vol. 79, No. 18, pp.
11607-11617.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 23 Nov 2005

Last Updated on STN: 23 Nov 2005

AB Hepatitis C virus (HCV) nonstructural protein 5B (NS5B) is the virus-encoded RNA-dependent RNA polymerase (RdRp) essential for HCV RNA replication. An earlier crystallographic study identified a rGTP-specific binding site lying at the surface between the thumb domain and the fingertip about 30 angstrom away from the active site of the HCV RdRp (S. Bressanelli, L. Tomei, F. A. Rey, and R. De Francesco, J. Virol 76:3482-3492, 2002). To determine its physiological importance, we performed a systematic mutagenesis analysis of the rGTP-specific binding pocket by amino acid substitutions. Effects of mutations of the rGTP-specific binding site on enzymatic activity were determined by an in vitro RdRp assay, while effects of mutations on HCV RNA replication were examined by cell colony formation, as well as by transient replication of subgenomic HCV RNAs. Results derived from these studies demonstrate that amino acid substitutions of the rGTP-specific binding pocket did not significantly affect the in vitro RdRp activity of purified recombinant NS5B proteins, as measured by their abilities to synthesize RNA on an RNA template containing the 3' untranslated region of HCV negative-strand RNA. However, most mutations of the rGTP-specific binding site either impaired or completely ablated the ability of subgenomic HCV RNAs to induce cell colony formation. Likewise, these mutations caused either reduction in or lethality to transient replication of the human immunodeficiency virus Tat-expressing HCV

replicon RNAs in the cell. Collectively, these findings demonstrate that the rGTP-specific binding site of the HCV NS5B is not required for in vitro RdRp activity but is important for HCV RNA replication in vivo.

L8 ANSWER 5 OF 6 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:499441 BIOSIS

DOCUMENT NUMBER: PREV200510264656

TITLE: Screening for hepatitis C virus antiviral activity with a cell-based secreted alkaline phosphatase reporter replicon system.

AUTHOR(S): Bourne, Nigel [Reprint Author]; Pyles, Richard B.; Yi, MinKyung; Veselenak, Ronald L.; Davis, Melissa M.; Lemon, Stanley M.

CORPORATE SOURCE: Univ Texas, Med Branch, Dept Pediat, 301 Univ Blvd, Galveston, TX 77555 USA
nibourne@utmb.edu

SOURCE: Antiviral Research, (AUG 2005) Vol. 67, No. 2, pp. 76-82.
CODEN: ARSRDR. ISSN: 0166-3542.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 16 Nov 2005

Last Updated on STN: 16 Nov 2005

AB We describe a phased screening system for discovery of compounds with antiviral activity against hepatitis C virus (HCV). The primary assay utilizes dicistronic subgenomic HCV replicons in which the upstream cistron was modified to express the human immunodeficiency virus (HIV) tat protein. When these replicons are stably transfected into Huh-7-derived cells that express secreted alkaline phosphatase (SEAP) under transcriptional control of the HIV long terminal repeat promoter, there is a strong correlation between intracellular HCV RNA abundance and the activity of SEAP secreted into the culture medium. Thus, active compounds are easily identified by direct enzymatic quantification of SEAP in the medium without post-assay processing. Compounds that reduce SEAP activity without causing cellular toxicity are next evaluated in a second Huh-7-derived cell line constitutively expressing SEAP under control of the tat-HIV promoter axis, independent of HCV RNA replication. This specificity control identifies compounds that cause reductions in SEAP that are unrelated to suppression of HCV RNA replication. Compounds showing HCV-specific activity in primary assays are next evaluated by real-time RT-PCR to directly quantify reductions in HCV RNA. We have found excellent agreement between the SEAP and RT-PCR assays. This phased system provides an efficient and cost-effective screen for compounds with antiviral activity

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L8 ANSWER 6 OF 6 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:40211 BIOSIS

DOCUMENT NUMBER: PREV200300040211

TITLE: Subgenomic hepatitis C virus replicons inducing expression of a secreted enzymatic reporter protein.

AUTHOR(S): Yi, Minkyung; Bodola, Francis; Lemon, Stanley M. [Reprint Author]

CORPORATE SOURCE: Department of Microbiology and Immunology, Medical Branch

at Galveston, University of Texas, 301 University Boulevard, Galveston, TX, 77555-1019, USA
smlemon@utmb.edu

SOURCE: Virology, (December 20 2002) Vol. 304, No. 2, pp. 197-210.
print.

ISSN: 0042-6822 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 15 Jan 2003

Last Updated on STN: 15 Jan 2003

AB We constructed dicistronic, subgenomic hepatitis C virus (HCV) replicons in which the sequence encoding the human immunodeficiency virus (HIV) tat protein was placed in the upstream cistron, between the HCV 5'NTR and a picornaviral 2A proteinase sequence fused to the selectable marker Neo. Stably transformed Huh7 cells expressing secreted alkaline phosphatase (SEAP) under transcriptional control of the HIV LTR promoter actively secreted SEAP following transfection with these replicon RNAs. Extracellular SEAP activity correlated closely with intracellular HCV RNA levels, as determined by Northern blotting and real-time RT-PCR analysis. These RNAs replicated efficiently despite the absence of core-protein-coding sequence downstream of the HCV IRES. The replication efficiency of replicons derived from the HCV -N strain of HCV was significantly greater than those derived from Con1 in transiently transfected cells. Using this reporter system, we have demonstrated significant differences in the response to interferon alpha-2b in cell lines containing replicons derived from these two strains of HCV.

=> mutant and l1

L9 91 MUTANT AND L1

=> replicon and L9

L10 91 REPLICON AND L9

=> subgenomic and L10

L11 54 SUBGENOMIC AND L10

=> D L11 IBIB TI 1-54

L11 ANSWER 1 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:478128 CAPLUS

DOCUMENT NUMBER: 145:202057

TITLE: Inhibition of hepatitis C replicon RNA
synthesis by .beta.-D-2'-deoxy-2'-fluoro-2'-C-
methylcytidine: a specific inhibitor of hepatitis C
virus replication

AUTHOR(S): Stuyver, Lieven J.; McBrayer, Tamara R.; Tharnish,
Phillip M.; Clark, Jeremy; Hollecker, Laurent; Lostia,
Stefania; Nachman, Tammy; Grier, Jason; Bennett,
Matthew A.; Xie, Meng-Yu; Schinazi, Raymond F.;
Morrey, John D.; Julander, Justin L.; Furman, Phillip
A.; Otto, Michael J.

CORPORATE SOURCE: Pharmasset Inc, Princeton, NJ, USA

SOURCE: Antiviral Chemistry & Chemotherapy (2006), 17(2),
79-87

CODEN: ACCHEH; ISSN: 0956-3202

PUBLISHER: International Medical Press, Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Inhibition of hepatitis C replicon RNA synthesis by
.beta.-D-2'-deoxy-2'-fluoro-2'-C-methylcytidine: a specific inhibitor of
hepatitis C virus replication

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:326091 CAPLUS

DOCUMENT NUMBER: 144:366251

TITLE: Effect of hepatitis C virus (HCV)
NS5B-nucleolin interaction on HCV
replication with HCV subgenomic
replicon

AUTHOR(S): Shimakami, Tetsuro; Honda, Masao; Kusakawa, Takashi;
Murata, Takayuki; Shimotohno, Kunitada; Kaneko,
Shuichi; Murakami, Seishi

CORPORATE SOURCE: Department of Gastroenterology, Kanazawa University
Graduate School of Medicine, Kanazawa, Ishikawa,

920-0934, Japan
SOURCE: Journal of Virology (2006), 80(7), 3332-3340
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Effect of hepatitis C virus (HCV) NS5B-nucleolin interaction on
HCV replication with HCV subgenomic
replicon
REFERENCE COUNT: 72 THERE ARE 72 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:110540 CAPLUS
DOCUMENT NUMBER: 144:365287
TITLE: Structural and Biological Identification of Residues
on the Surface of NS3 Helicase Required for Optimal
Replication of the Hepatitis C Virus
AUTHOR(S): Mackintosh, Samuel G.; Lu, Jeff Zhiqiang; Jordan, John
B.; Harrison, Melody K.; Sikora, Bartek; Sharma,
Suresh D.; Cameron, Craig E.; Raney, Kevin D.; Sakon,
Joshua
CORPORATE SOURCE: Department of Biochemistry and Molecular Biology,
University of Arkansas for Medical Sciences, Little
Rock, AR, 72205, USA
SOURCE: Journal of Biological Chemistry (2006), 281(6),
3528-3535
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular
Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Structural and Biological Identification of Residues on the Surface of NS3
Helicase Required for Optimal Replication of the Hepatitis C Virus
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:109038 CAPLUS
DOCUMENT NUMBER: 144:461804
TITLE: Insertion and deletion analyses identify regions of
non-structural protein 5A of Hepatitis C virus that
are dispensable for viral genome replication
AUTHOR(S): Liu, Shuanghu; Ansari, Israrul H.; Das, Subash C.;

Pattnaik, Asit K.
CORPORATE SOURCE: Department of Veterinary and Biomedical Sciences and
Nebraska Center for Virology, University of
Nebraska-Lincoln (UNL), Lincoln, NE, 68588-0666, USA
SOURCE: Journal of General Virology (2006), 87(2), 323-327
CODEN: JGVIAI; ISSN: 0022-1317
PUBLISHER: Society for General Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Insertion and deletion analyses identify regions of non-structural protein
5A of Hepatitis C virus that are dispensable for viral genome replication
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 5 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1235073 CAPLUS
DOCUMENT NUMBER: 144:123735
TITLE: Binding Site Characterization and Resistance to a
Class of Non-nucleoside Inhibitors of the Hepatitis C
Virus NS5B Polymerase
AUTHOR(S): Kukolj, George; McGibbon, Graham A.; McKercher,
Ginette; Marquis, Martin; Lefebvre, Sylvain;
Thauvette, Louise; Gauthier, Jean; Goulet, Sylvie;
Poupart, Marc-Andre; Beaulieu, Pierre L.
CORPORATE SOURCE: Departments of Biological Sciences and Chemistry,
Research and Development, Boehringer Ingelheim, Ltd.,
Laval, QC, H7S 2G5, Can.
SOURCE: Journal of Biological Chemistry (2005), 280(47),
39260-39267
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular
Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Binding Site Characterization and Resistance to a Class of Non-nucleoside
Inhibitors of the Hepatitis C Virus NS5B Polymerase
REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 6 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1191118 CAPLUS
DOCUMENT NUMBER: 144:18739
TITLE: Functional Analysis of RNA Binding by the Hepatitis C
Virus RNA-dependent RNA Polymerase

AUTHOR(S): Kim, Young-Chan; Russell, William K.; Ranjith-Kumar,
C. T.; Thomson, Michael; Russell, David H.; Kao, C.
Cheng
CORPORATE SOURCE: Departments of Biochemistry and Biophysics, Texas
A&M
University, College Station, TX, 77843, USA
SOURCE: Journal of Biological Chemistry (2005), 280(45),
38011-38019
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular
Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Functional Analysis of RNA Binding by the Hepatitis C Virus RNA-dependent
RNA Polymerase
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1160403 CAPLUS
DOCUMENT NUMBER: 144:1953
TITLE: Human VAP-B is involved in hepatitis C virus
replication through interaction with NS5A and NS5B
AUTHOR(S): Hamamoto, Itsuki; Nishimura, Yorihiro; Okamoto, Toru;
Aizaki, Hideki; Liu, Minyi; Mori, Yoshio; Abe,
Takayuki; Suzuki, Tetsuro; Lai, Michael M. C.;
Miyamura, Tatsuo; Moriishi, Kohji; Matsuura, Yoshiharu
CORPORATE SOURCE: Department of Molecular Virology, Research Institute
for Microbial Diseases, Osaka University, Osaka, Japan
SOURCE: Journal of Virology (2005), 79(21), 13473-13482
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI Human VAP-B is involved in hepatitis C virus replication through
interaction with NS5A and NS5B
REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1093801 CAPLUS
DOCUMENT NUMBER: 144:17755
TITLE: Mutations conferring resistance to a hepatitis C virus
(HCV) RNA-dependent RNA polymerase inhibitor alone or

in combination with an HCV serine protease inhibitor
in vitro

AUTHOR(S): Mo, Hongmei; Lu, Liangjun; Pilot-Matias, Tami;
Pithawalla, Ron; Mondal, Rubina; Masse, Sherie;
Dekhlyar, Tatyana; Ng, Teresa; Koev, Gennadiy; Stoll,
Vincent; Stewart, Kent D.; Pratt, John; Donner, Pam;
Rockway, Todd; Maring, Clarence; Molla, Akhteruzzaman
CORPORATE SOURCE: Antiviral Research, Abbott Laboratories Global
Pharmaceutical Research and Development, Abbott Park,
IL, USA

SOURCE: Antimicrobial Agents and Chemotherapy (2005), 49(10),
4305-4314

CODEN: AMACCQ; ISSN: 0066-4804

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Mutations conferring resistance to a hepatitis C virus (HCV) RNA-dependent
RNA polymerase inhibitor alone or in combination with an HCV serine
protease inhibitor in vitro

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES

AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:592612 CAPLUS

DOCUMENT NUMBER: 144:200

TITLE: Inhibition of hepatitis C virus translation and
subgenomic replication by siRNAs directed
against highly conserved HCV sequence and cellular HCV
cofactors

AUTHOR(S): Korf, Mortimer; Jarczak, Dominik; Beger, Carmela;
Manns, Michael P.; Kruger, Martin

CORPORATE SOURCE: Department of Gastroenterology, Hepatology and
Endocrinology, Medizinische Hochschule Hannover,
Hannover, D-30625, Germany

SOURCE: Journal of Hepatology (2005), 43(2), 225-234

CODEN: JOHEEC; ISSN: 0168-8278

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Inhibition of hepatitis C virus translation and subgenomic
replication by siRNAs directed against highly conserved HCV sequence and
cellular HCV cofactors

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES

AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:409553 CAPLUS
 DOCUMENT NUMBER: 142:459118
 TITLE: HCV NS3-NS4A protease resistance mutants
 affecting the activity of NS3-NS4A inhibitory drugs
 VX-950 and BILN2061 and structure-based anti-HCV drug
 design
 INVENTOR(S): Lin, Chao; Lin, Kai
 PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA
 SOURCE: PCT Int. Appl., 113 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005042570	A1	20050512	WO 2004-US35839	20041027
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004285019	A1	20050512	AU 2004-285019	20041027
CA 2551074	AA	20050512	CA 2004-2551074	20041027
US 2005136400	A1	20050623	US 2004-974558	20041027
EP 1678202	A1	20060712	EP 2004-817468	20041027
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
PRIORITY APPLN. INFO.: US 2003-514740P P 20031027 US 2003-525222P P 20031126 US 2004-561662P P 20040413 WO 2004-US35839 W 20041027				
TI HCV NS3-NS4A protease resistance mutants affecting the activity of NS3-NS4A inhibitory drugs VX-950 and BILN2061 and structure-based anti-HCV drug design				
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS				

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 11 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:52923 CAPLUS

DOCUMENT NUMBER: 142:274932

TITLE: Efficient rescue of hepatitis C virus RNA replication
by trans-complementation with nonstructural protein 5A

AUTHOR(S): Appel, Nicole; Herian, Ulrike; Bartenschlager, Ralf

CORPORATE SOURCE: Department of Molecular Virology, University of
Heidelberg, Heidelberg, Germany

SOURCE: Journal of Virology (2005), 79(2), 896-909

CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Efficient rescue of hepatitis C virus RNA replication by
trans-complementation with nonstructural protein 5A

REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:458331 CAPLUS

DOCUMENT NUMBER: 141:119287

TITLE: Mutational Analysis of Hepatitis C Virus NS5B in the
Subgenomic Replicon Cell Culture

AUTHOR(S): Ma, Yuanyuan; Shimakami, Tetsuro; Luo, Hong; Hayashi,
Naoyuki; Murakami, Seishi

CORPORATE SOURCE: Department of Molecular Oncology, Cancer Research
Institute, Kanazawa University Graduate School of
Medicine, Kanazawa, Ishikawa, 920-0934, Japan

SOURCE: Journal of Biological Chemistry (2004), 279(24),
25474-25482

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular
Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Mutational Analysis of Hepatitis C Virus NS5B in the Subgenomic
Replicon Cell Culture

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 13 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:325457 CAPLUS

DOCUMENT NUMBER: 141:16899
TITLE: In Vitro Resistance Studies of Hepatitis C Virus
Serine Protease Inhibitors, VX-950 and BILN 2061:
structural analysis indicates different resistance
mechanisms
AUTHOR(S): Lin, Chao; Lin, Kai; Luong, Yu-Ping; Rao, B. Govinda;
Wei, Yun-Yi; Brennan, Debra L.; Fulghum, John R.;
Hsiao, Hsun-Mei; Ma, Sue; Maxwell, John P.; Cottrell,
Kevin M.; Perni, Robert B.; Gates, Cynthia A.; Kwong,
Ann D.
CORPORATE SOURCE: Vertex Pharmaceuticals Inc., Cambridge, MA, 02139,
USA
SOURCE: Journal of Biological Chemistry (2004), 279(17),
17508-17514
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular
Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI In Vitro Resistance Studies of Hepatitis C Virus Serine Protease
Inhibitors, VX-950 and BILN 2061: structural analysis indicates different
resistance mechanisms
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 14 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:266699 CAPLUS
DOCUMENT NUMBER: 140:420498
TITLE: The C-terminal transmembrane domain of hepatitis C
virus (HCV) RNA polymerase is essential for HCV
replication in vivo
AUTHOR(S): Lee, Ki Jeong; Choi, Jinah; Ou, Jing-hsiung; Lai,
Michael M. C.
CORPORATE SOURCE: Department of Molecular Microbiology and Immunology,
Keck School of Medicine, University of Southern
California, Los Angeles, CA, 90033, USA
SOURCE: Journal of Virology (2004), 78(7), 3797-3802
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
TI The C-terminal transmembrane domain of hepatitis C virus (HCV) RNA
polymerase is essential for HCV replication in vivo
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:248771 CAPLUS

DOCUMENT NUMBER: 140:389517

TITLE: Induced oxidative stress and activated expression of
manganese superoxide dismutase during hepatitis C
virus replication: role of JNK, p38 MAPK and AP-1

AUTHOR(S): Qadri, Ishtiaq; Iwahashi, Mieko; Capasso, Juan M.;
Hopken, Matthew W.; Flores, Sonia; Schaack, Jerome;
Simon, Francis R.

CORPORATE SOURCE: Division of Gastroenterology and Hepatology,
Department of Medicine, University of Colorado Health
Sciences Center, Denver, CO, 80262, USA

SOURCE: Biochemical Journal (2004), 378(3), 919-928
CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Induced oxidative stress and activated expression of manganese superoxide
dismutase during hepatitis C virus replication: role of JNK, p38 MAPK and
AP-1

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:39320 CAPLUS

DOCUMENT NUMBER: 140:263848

TITLE: Characterization of the inhibition of hepatitis C
virus RNA replication by nonnucleosides

AUTHOR(S): Tomei, Licia; Altamura, Sergio; Bartholomew, Linda;
Bisbocci, Monica; Bailey, Carolyn; Bosserman, Michele;
Cellucci, Antonella; Forte, Eleonora; Incitti, Ilario;
Orsatti, Laura; Koch, Uwe; De Francesco, Raffaele;
Olsen, David B.; Carroll, Steven S.; Migliaccio,
Giovanni

CORPORATE SOURCE: Department of Biochemistry, Istituto di Ricerche di
Biologia Molecolare P. Angeletti (IRBM), Pomezia,
Italy

SOURCE: Journal of Virology (2004), 78(2), 938-946
CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Characterization of the inhibition of hepatitis C virus RNA replication by

nonnucleosides

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 17 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:39297 CAPLUS

DOCUMENT NUMBER: 140:231279

TITLE: Conserved C-terminal threonine of hepatitis C virus
NS3 regulates autoproteolysis and prevents product
inhibition

AUTHOR(S): Wang, Wenyan; Lahser, Frederick C.; Yi, Min Kyung;
Wright-Minogue, Jacquelyn; Xia, Ellen; Weber, Patricia
C.; Lemon, Stanley M.; Malcolm, Bruce A.

CORPORATE SOURCE: Department of Structural Chemistry, Schering-Plough
Research Institute, Kenilworth, NJ, 07033, USA

SOURCE: Journal of Virology (2004), 78(2), 700-709

CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Conserved C-terminal threonine of hepatitis C virus NS3 regulates
autoproteolysis and prevents product inhibition

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES

AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:883438 CAPLUS

DOCUMENT NUMBER: 140:89538

TITLE: Direct interaction between .alpha.-actinin and
hepatitis C virus NS5B

AUTHOR(S): Lan, Shuiyun; Wang, Hua; Jiang, Hong; Mao, Hongxia;
Liu, Xiaoying; Zhang, Xiaonan; Hu, Yunwen; Xiang, Li;
Yuan, Zhenghong

CORPORATE SOURCE: Shanghai Medical College, Key Laboratory of Medical
Molecular Virology, Fudan University, Shanghai,
200032, Peop. Rep. China

SOURCE: FEBS Letters (2003), 554(3), 289-294

CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Direct interaction between .alpha.-actinin and hepatitis C virus NS5B

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES

AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 19 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:811326 CAPLUS

DOCUMENT NUMBER: 139:321251

TITLE: Hepatitis C virus NS5A and subgenomic
replicon activate NF- κ B via tyrosine
phosphorylation of I κ B α and its
degradation by calpain protease

AUTHOR(S): Waris, Gulam; Livolsi, Antonia; Imbert, Veronique;
Peyron, Jean-Francois; Siddiqui, Aleem

CORPORATE SOURCE: Department of Microbiology and Program in Molecular
Biology, University of Colorado Health Sciences
Center, Denver, CO, 80262, USA

SOURCE: Journal of Biological Chemistry (2003), 278(42),
40778-40787

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular
Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Hepatitis C virus NS5A and subgenomic replicon
activate NF- κ B via tyrosine phosphorylation of I κ B α and
its degradation by calpain protease

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 20 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:366153 CAPLUS

DOCUMENT NUMBER: 139:20427

TITLE: The Hepatitis C Virus Non-structural NS5A Protein
Inhibits Activating Protein-1 Function by Perturbing
Ras-ERK Pathway Signaling

AUTHOR(S): Macdonald, Andrew; Crowder, Katherine; Street, Andrew;
McCormick, Christopher; Saksela, Kalle; Harris, Mark

CORPORATE SOURCE: School of Biochemistry and Molecular Biology, Division
of Microbiology, University of Leeds, Leeds, LS2 9JT,
UK

SOURCE: Journal of Biological Chemistry (2003), 278(20),
17775-17784

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular
Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI The Hepatitis C Virus Non-structural NS5A Protein Inhibits Activating
Protein-1 Function by Perturbing Ras-ERK Pathway Signaling

REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 21 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:311405 CAPLUS

DOCUMENT NUMBER: 139:209691

TITLE: Development of a cell-based assay for monitoring
specific hepatitis C virus NS3/4A protease activity in
mammalian cells

AUTHOR(S): Lee, Jin-Ching; Shih, Ya-Feng; Hsu, Sung-Po; Chang,
Ten-Yuan; Chen, Lee-Hua; Hsu, John T. A.

CORPORATE SOURCE: Division of Biotechnology and Pharmaceutical Research,
National Health Research Institutes, Taipei, 115,
Taiwan

SOURCE: Analytical Biochemistry (2003), 316(2), 162-170
CODEN: ANBCA2; ISSN: 0003-2697

PUBLISHER: Elsevier Science

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Development of a cell-based assay for monitoring specific hepatitis C
virus NS3/4A protease activity in mammalian cells

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:246806 CAPLUS

DOCUMENT NUMBER: 139:67081

TITLE: Interaction with a ubiquitin-like protein enhances the
ubiquitination and degradation of hepatitis C virus
RNA-dependent RNA polymerase

AUTHOR(S): Gao, Lu; Tu, Hong; Shi, Stephanie T.; Lee, Ki-Jeong;
Asanaka, Miyuki; Hwang, Soon B.; Lai, Michael M. C.

CORPORATE SOURCE: Department of Molecular Microbiology and Immunology,
Keck School of Medicine, University of Southern
California, Los Angeles, CA, 90033, USA

SOURCE: Journal of Virology (2003), 77(7), 4149-4159
CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Interaction with a ubiquitin-like protein enhances the ubiquitination and
degradation of hepatitis C virus RNA-dependent RNA polymerase

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES
AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 23 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:199010 CAPLUS

DOCUMENT NUMBER: 139:223763

TITLE: In vitro selection and characterization of hepatitis C
virus serine protease variants resistant to an
active-site peptide inhibitor

AUTHOR(S): Trozzi, Caterina; Bartholomew, Linda; Ceccacci,
Alessandra; Biasiol, Gabriella; Pacini, Laura;
Altamura, Sergio; Narjes, Frank; Muraglia, Ester;
Paonessa, Giacomo; Koch, Uwe; De Francesco, Raffaele;
Steinkuhler, Christian; Migliaccio, Giovanni

CORPORATE SOURCE: IRBM "P. Angeletti", Rome, 00040, Italy

SOURCE: Journal of Virology (2003), 77(6), 3669-3679

CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI In vitro selection and characterization of hepatitis C virus serine
protease variants resistant to an active-site peptide inhibitor

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES

AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 24 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:198999 CAPLUS

DOCUMENT NUMBER: 139:31700

TITLE: 3' Nontranslated RNA signals required for replication
of hepatitis c virus RNA

AUTHOR(S): Yi, MinKyung; Lemon, Stanley M.

CORPORATE SOURCE: Department of Microbiology and Immunology, The
University of Texas Medical Branch at Galveston,
Galveston, TX, 77555-1019, USA

SOURCE: Journal of Virology (2003), 77(6), 3557-3568

CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI 3' Nontranslated RNA signals required for replication of hepatitis c virus
RNA

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES

AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:375453 CAPLUS

DOCUMENT NUMBER: 137:196537

TITLE: Genetic analysis of sequences in the 3' nontranslated
region of hepatitis C virus that are important for RNA
replication

AUTHOR(S): Friebe, Peter; Bartenschlager, Ralf

CORPORATE SOURCE: Institute for Virology, Johannes Gutenberg University
Mainz, Mainz, 55131, Germany

SOURCE: Journal of Virology (2002), 76(11), 5326-5338

CODEN: JOVIAM; ISSN: 0022-538X

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Genetic analysis of sequences in the 3' nontranslated region of hepatitis
C virus that are important for RNA replication

REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES

AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 26 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:123200 CAPLUS

DOCUMENT NUMBER: 136:178940

TITLE: Cells with enhanced replication of hepatitis C virus
sub-genomic RNA and its use in antiviral drug
screening

INVENTOR(S): Lu, Hui-Hua; Selby, Mark

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012477	A2	20020214	WO 2001-US124276	20010803
WO 2002012477	A3	20030410		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
TR, TT, UA, UG, US, UZ, VN, YU, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG,

KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG

CA 2416633 AA 20020214 CA 2001-2416633 20010803
AU 2001078139 A5 20020218 AU 2001-78139 20010803
US 2002142455 A1 20021003 US 2001-922962 20010803
US 6660471 B2 20031209
EP 1320583 A2 20030625 EP 2001-956106 20010803
EP 1320583 B1 20060301

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

AT 318893 E 20060315 AT 2001-956106 20010803
US 2004076612 A1 20040422 US 2003-684846 20031014

PRIORITY APPLN. INFO.: US 2000-223244P P 20000804
US 2001-922962 A3 20010803
WO 2001-US24276 W 20010803

TI Cells with enhanced replication of hepatitis C virus sub-genomic RNA and
its use in antiviral drug screening

L11 ANSWER 27 OF 54 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:251500 CAPLUS

DOCUMENT NUMBER: 135:18375

TITLE: Interferon-.alpha. inhibits hepatitis C virus
subgenomic RNA replication by an
MxA-independent pathway

AUTHOR(S): Frese, Michael; Pietschmann, Thomas; Moradpour,
Darius; Haller, Otto; Bartenschlager, Ralf

CORPORATE SOURCE: Abteilung Virologie, Institut für Medizinische
Mikrobiologie und Hygiene, Universität Freiburg,
Freiburg, D-79104, Germany

SOURCE: Journal of General Virology (2001), 82(4), 723-733
CODEN: JGVIAY; ISSN: 0022-1317

PUBLISHER: Society for General Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

TI Interferon-.alpha. inhibits hepatitis C virus subgenomic RNA
replication by an MxA-independent pathway

REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES
AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 28 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2006:330985 BIOSIS

DOCUMENT NUMBER: PREV200600330857

TITLE: Effect of hepatitis C virus (HCV) NS5B-nucleolin interaction on HCV replication with HCV subgenomic replicon.

AUTHOR(S): Shimakami, Tetsuro; Honda, Masao; Kusakawa, Takashi; Murata, Takayuki; Shimotohno, Kunitada; Kaneko, Shuichi; Murakami, Seishi [Reprint Author]

CORPORATE SOURCE: Kanazawa Univ, Dept Mol Oncol, Canc Res Inst, 13-1 Takara
Machi, Kanazawa, Ishikawa 9200934, Japan
semuraka@kenroku.kanazawa-u.ac.jp

SOURCE: Journal of Virology, (APR 2006) Vol. 80, No. 7, pp. 3332-3340.
CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 28 Jun 2006
Last Updated on STN: 28 Jun 2006

TI Effect of hepatitis C virus (HCV) NS5B-nucleolin interaction on HCV replication with HCV subgenomic replicon.

L11 ANSWER 29 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 2006:253016 BIOSIS

DOCUMENT NUMBER: PREV200600249606

TITLE: Structural and biological identification of residues on the surface of NS3 helicase required for optimal replication of the hepatitis C virus.

AUTHOR(S): Mackintosh, Samuel G.; Lu, Jeff Zhiqiang; Jordan, John B.; Harrison, Melody K.; Sikora, Bartek; Sharma, Suresh D.; Cameron, Craig E.; Raney, Kevin D. [Reprint Author]; Sakon, Joshua

CORPORATE SOURCE: Univ Arkansas Med Sci, Dept Biochem and Mol Biol, Little Rock, AR 72205 USA
raneykevind@uams.edu; jsakon@uark.edu

SOURCE: Journal of Biological Chemistry, (FEB 10 2006) Vol. 281, No. 6, pp. 3528-3535.
CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 26 Apr 2006
Last Updated on STN: 26 Apr 2006

TI Structural and biological identification of residues on the surface of NS3 helicase required for optimal replication of the hepatitis C virus.

L11 ANSWER 30 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2006:238828 BIOSIS

DOCUMENT NUMBER: PREV200600239794

TITLE: Insertion and deletion analyses identify regions of
non-structural protein 5A of Hepatitis C virus that are
dispensable for viral genome replication.

AUTHOR(S): Liu, Shuanghu; Ansari, Israrul H.; Das, Subash C.;
Pattnaik, Asit K. [Reprint Author]

CORPORATE SOURCE: Univ Nebraska, Dept Vet and Biomed Sci, E126 Beadle
Ctr, 1901 Vine St, Lincoln, NE 68588 USA
apattnaik2@unl.edu

SOURCE: Journal of General Virology, (FEB 2006) Vol. 87, No. Part
2, pp. 323-327.

CODEN: JGVIA Y. ISSN: 0022-1317.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 19 Apr 2006

Last Updated on STN: 19 Apr 2006

TI Insertion and deletion analyses identify regions of non-structural protein
5A of Hepatitis C virus that are dispensable for viral genome replication.

L11 ANSWER 31 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2006:210739 BIOSIS

DOCUMENT NUMBER: PREV200600212468

TITLE: Persistence of HCV replication in sirna-treated
HCV replicon cells is correlated with the
development of HCV mutations.

AUTHOR(S): Konishi, Masayoshi; Kaito, Masahiko; Adachi, Yukihiro; Wu,
Catherine H.; Wu, George Y.

SOURCE: Gastroenterology, (APR 2005) Vol. 128, No. 4, Suppl. 2, pp.
A698.

Meeting Info.: Annual Meeting of the American-
Gastroenterological-Association/Digestive-Disease-Week.
Chicago, IL, USA. May 14 -19, 2005. Amer Gastroenterol
Assoc.

CODEN: GASTAB. ISSN: 0016-5085.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 29 Mar 2006

Last Updated on STN: 29 Mar 2006

TI Persistence of HCV replication in sirna-treated HCV

replicon cells is correlated with the development of HCV mutations.

L11 ANSWER 32 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2006:210729 BIOSIS

DOCUMENT NUMBER: PREV200600212458

TITLE: Tumor suppressor p53 inhibits replication of hepatitis C
virus subgenomic replicon in human
hepatoma cells.

AUTHOR(S): Dharel, Narayan; Kato, Naoya; Taniguchi, Hiroyoshi; Otsuka,
Motoyuki; Moriyama, Masaru; Muroyama, Ryosuke; Wang, Yen;
Shao, Run-Xuan; Kawabe, Takao; Omata, Masao

SOURCE: Gastroenterology, (APR 2005) Vol. 128, No. 4, Suppl. 2, pp.
A696,A695.

Meeting Info.: Annual Meeting of the American-
Gastroenterological-Association/Digestive-Disease-Week.
Chicago, IL, USA. May 14 -19, 2005. Amer Gastroenterol
Assoc.

CODEN: GASTAB. ISSN: 0016-5085.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 29 Mar 2006

Last Updated on STN: 29 Mar 2006

TI Tumor suppressor p53 inhibits replication of hepatitis C virus
subgenomic replicon in human hepatoma cells.

L11 ANSWER 33 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2006:94810 BIOSIS

DOCUMENT NUMBER: PREV200600096254

TITLE: Binding site characterization and resistance to a class of
non-nucleoside inhibitors of the hepatitis C virus NS5B
polymerase.

AUTHOR(S): Kukolj, George [Reprint Author]; McGibbon, Graham A.;
McKercher, Ginette; Marquis, Martin; Lefebvre, Sylvain;
Thauvette, Louise; Gauthier, Jean; Goulet, Sylvie; Poupert,
Marc-Andre; Beaulieu, Pierre L.

CORPORATE SOURCE: 2100 Rue Cunard, Laval, PQ H7S 2G5, Canada
gkukolj@lav.boehringer-ingenelheim.com

SOURCE: Journal of Biological Chemistry, (NOV 25 2005) Vol. 280,
No. 47, pp. 39260-39267.

CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 1 Feb 2006

Last Updated on STN: 1 Feb 2006

TI Binding site characterization and resistance to a class of non-nucleoside inhibitors of the hepatitis C virus NS5B polymerase.

L11 ANSWER 34 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2006:84742 BIOSIS

DOCUMENT NUMBER: PREV200600087968

TITLE: Functional analysis of RNA binding by the hepatitis C virus
RNA-dependent RNA polymerase.

AUTHOR(S): Kim, Young-Chan; Russell, William K.; Ranjith-Kumar, C. T.;
Thomson, Michael; Russell, David H.; Kao, C. Cheng [Reprint
Author]

CORPORATE SOURCE: Texas A and M Univ, Dept Biochem and Biophys, College
Stn,

TX 77843 USA

ckao@tamu.edu

SOURCE: Journal of Biological Chemistry, (NOV 11 2005) Vol. 280,
No. 45, pp. 38011-38019.

CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 25 Jan 2006

Last Updated on STN: 25 Jan 2006

TI Functional analysis of RNA binding by the hepatitis C virus RNA-dependent
RNA polymerase.

L11 ANSWER 35 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2006:39647 BIOSIS

DOCUMENT NUMBER: PREV200600039227

TITLE: Human VAP-B is involved in hepatitis C virus replication
through interaction with NS5A and NS5B.

AUTHOR(S): Hamamoto, Itsuki; Nishimura, Yorihiro; Okamoto, Toru;
Aizaki, Hideki; Liu, Minyi; Mori, Yoshio; Abe, Takayuki;
Suzuki, Tetsuro; Lai, Michael M. C.; Miyamura, Tatsuo;
Moriishi, Kohji; Matsuura, Yoshiharu [Reprint Author]

CORPORATE SOURCE: Osaka Univ, Microbial Dis Res Inst, Dept Mol Virol, 3-1
Yamadaoka, Suita, Osaka 5650871, Japan

matsuura@biken.osaka-u.ac.jp

SOURCE: Journal of Virology, (NOV 2005) Vol. 79, No. 21, pp.

13473-13482.

CODEN: JOVIAM. ISSN: 0022-538X.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 28 Dec 2005

Last Updated on STN: 28 Dec 2005

TI Human VAP-B is involved in hepatitis C virus replication through interaction with NS5A and NS5B.

L11 ANSWER 36 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2005:455675 BIOSIS

DOCUMENT NUMBER: PREV200510233021

TITLE: Mutations conferring resistance to a hepatitis C virus
(HCV) RNA-dependent RNA polymerase inhibitor alone or in
combination with an HCV serine protease inhibitor in vitro.

AUTHOR(S): Mo, Hongmei [Reprint Author]; Lu, Liangjun; Pilot-Matias,
Tami; Pithawalla, Ron; Mondal, Rubina; Masse, Sherie;
Dekhtyar, Tatyana; Ng, Teresa; Koev, Gennadiy; Stoll,
Vincent; Stewart, Kent D.; Pratt, John; Donner, Pam;
Rockway, Todd; Maring, Clarence; Molla, Akhteruzzaman

CORPORATE SOURCE: Dept R47D, Bldg AP52-N, 200 Abbott Pk Rd, Abbott Pk, IL
60064 USA

Hongmei.Mo@abbott.com

SOURCE: Antimicrobial Agents and Chemotherapy, (OCT 2005) Vol. 49,
No. 10, pp. 4305-4314.

CODEN: AMACQ. ISSN: 0066-4804.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Nov 2005

Last Updated on STN: 3 Nov 2005

TI Mutations conferring resistance to a hepatitis C virus (HCV) RNA-dependent
RNA polymerase inhibitor alone or in combination with an HCV serine
protease inhibitor in vitro.

L11 ANSWER 37 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2005:367801 BIOSIS

DOCUMENT NUMBER: PREV200510150177

TITLE: Inhibition of hepatitis C virus translation and
subgenomic replication by siRNAs directed against
highly conserved HCV sequence and cellular HCV cofactors.

AUTHOR(S): Korf, Mortimer; Jarczak, Dominik; Beger, Carmela; Manns,
Michael P.; Krueger, Martin [Reprint Author]

CORPORATE SOURCE: Med Hsch Hannover, Dept Gastroenterol Hepatol and
Endocrinol, Carl Neuberg Str 1, D-30625 Hannover, Germany
krueger.martin@mh-hannover.de

SOURCE: Journal of Hepatology, (AUG 2005) Vol. 43, No. 2, pp.
225-234.

CODEN: JOHEEC. ISSN: 0168-8278.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 14 Sep 2005

Last Updated on STN: 14 Sep 2005

TI Inhibition of hepatitis C virus translation and subgenomic
replication by siRNAs directed against highly conserved HCV sequence and
cellular HCV cofactors.

L11 ANSWER 38 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2005:142311 BIOSIS

DOCUMENT NUMBER: PREV200500142761

TITLE: Efficient rescue of hepatitis C virus RNA replication by
trans-complementation with nonstructural protein 5A.

AUTHOR(S): Appel, Nicole; Herian, Ulrike; Bartenschlager, Ralf
[Reprint Author]

CORPORATE SOURCE: Dept Mol Virol, Univ Heidelberg, Neuenheimer Feld 345,
D-69120, Heidelberg, Germany
Ralf_Bartenschlager@med.uni-heidelberg.de

SOURCE: Journal of Virology, (January 2005) Vol. 79, No. 2, pp.
896-909. print.

ISSN: 0022-538X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Apr 2005

Last Updated on STN: 13 Apr 2005

TI Efficient rescue of hepatitis C virus RNA replication by
trans-complementation with nonstructural protein 5A.

L11 ANSWER 39 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2004:356829 BIOSIS

DOCUMENT NUMBER: PREV200400363278

TITLE: Dominant negative effect of wild-type NS5A on NS5A-adapted
subgenomic hepatitis C virus RNA replicon

AUTHOR(S): Graziani, Rita; Paonessa, Giacomo [Reprint Author]

CORPORATE SOURCE: Ist Ric Biol Mol P Angeletti, Via Pontina Km 30600,

I-00040, Pomezia, Italy
giacomo_paonessa@merck.com

SOURCE: Journal of General Virology, (July 2004) Vol. 85, No. Part
7, pp. 1867-1875. print.
ISSN: 0022-1317 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 5 Sep 2004

Last Updated on STN: 5 Sep 2004

TI Dominant negative effect of wild-type NS5A on NS5A-adapted
subgenomic hepatitis C virus RNA replicon.

L11 ANSWER 40 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2004:325860 BIOSIS

DOCUMENT NUMBER: PREV200400327486

TITLE: Mutational analysis of hepatitis C virus NS5B in the
subgenomic replicon cell culture.

AUTHOR(S): Ma, Yuanyuan; Shimakami, Tetsuro; Luo, Hong; Hayashi,
Naoyuki; Murakami, Seishi [Reprint Author]

CORPORATE SOURCE: Canc Res InstDept Mol Oncol, Kanazawa Univ, 13-1 Takara
Machi, Kanazawa, Ishikawa, 9200934, Japan
semuraka@kenroku.kanazawa-u.ac.jp

SOURCE: Journal of Biological Chemistry, (June 11 2004) Vol. 279,
No. 24, pp. 25474-25482. print.
CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 29 Jul 2004

Last Updated on STN: 29 Jul 2004

TI Mutational analysis of hepatitis C virus NS5B in the subgenomic
replicon cell culture.

L11 ANSWER 41 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2004:270606 BIOSIS

DOCUMENT NUMBER: PREV200400270690

TITLE: In vitro resistance studies of hepatitis C virus serine
protease inhibitors, VX-950 and BILN 2061 - Structural
analysis indicates different resistance mechanisms.

AUTHOR(S): Lin, Chao [Reprint Author]; Lin, Kai; Luong, Yu-Ping; Rao,
B. Govinda; Wei, Yun-Yi; Brennan, Debra L.; Fulghum, John
R.; Hsiao, Hsun-Mei; Ma, Sue; Maxwell, John P.; Cottrell,
Kevin M.; Perni, Robert B.; Gates, Cynthia A.; Kwong, Ann

D.

CORPORATE SOURCE: Vertex Pharmaceut Inc, 130 Waverly St, Cambridge, MA,
02139, USA

chao_lin@vrtx.com

SOURCE: Journal of Biological Chemistry, (April 23 2004) Vol. 279,
No. 17, pp. 17508-17514. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

OTHER SOURCE: DDBJ-CAB46913; EMBL-CAB46913; GenBank-CAB46913

ENTRY DATE: Entered STN: 26 May 2004

Last Updated on STN: 26 May 2004

TI In vitro resistance studies of hepatitis C virus serine protease
inhibitors, VX-950 and BILN 2061 - Structural analysis indicates different
resistance mechanisms.

L11 ANSWER 42 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2004:269442 BIOSIS

DOCUMENT NUMBER: PREV200400264651

TITLE: Induced oxidative stress and activated expression of
manganese superoxide dismutase during hepatitis C virus
replication: role of JNK, p38 MAR and AP-1.

AUTHOR(S): Qadri, Ishtiaq [Reprint Author]; Iwahashi, Mieko; Capasso,
Juan M.; Hopken, Matthew W.; Flores, Sonia; Schaack,
Jerome; Simon, Francis R.

CORPORATE SOURCE: Hlth Sci CtrDept MedDiv Gastroenterol & Hepatol, Univ
Colorado, 4200 E 9th Ave, Denver, CO, 80262, USA
ishtiaq.qadri@uchsc.edu

SOURCE: Biochemical Journal, (March 15 2004) Vol. 378, No. Part 3,
pp. 919-928. print.
ISSN: 0264-6021.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 26 May 2004

Last Updated on STN: 26 May 2004

TI Induced oxidative stress and activated expression of manganese superoxide
dismutase during hepatitis C virus replication: role of JNK, p38 MAR and
AP-1.

L11 ANSWER 43 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2004:225799 BIOSIS

DOCUMENT NUMBER: PREV200400226620

TITLE: The C-terminal transmembrane domain of hepatitis C virus (HCV) RNA polymerase is essential for HCV replication in vivo.

AUTHOR(S): Lee, Ki Jeong; Choi, Jinah; Ou, Jing-hsiung; Lai, Michael M. C. [Reprint Author]

CORPORATE SOURCE: Department of Molecular Microbiology and Immunology, Keck School of Medicine, University of Southern California, 2011 Zonal Ave., HMR-401, Los Angeles, CA, 90033, USA
michlai@usc.edu

SOURCE: Journal of Virology, (April 2004) Vol. 78, No. 7, pp. 3797-3802. print.
ISSN: 0022-538X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 21 Apr 2004
Last Updated on STN: 21 Apr 2004

TI The C-terminal transmembrane domain of hepatitis C virus (HCV) RNA polymerase is essential for HCV replication in vivo.

L11 ANSWER 44 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on

STN

ACCESSION NUMBER: 2004:111666 BIOSIS

DOCUMENT NUMBER: PREV200400113601

TITLE: Characterization of the inhibition of hepatitis C virus RNA replication by nonnucleosides.

AUTHOR(S): Tomei, Licia; Altamura, Sergio; Bartholomew, Linda; Bisbocci, Monica; Bailey, Carolyn; Bosserman, Michele; Cellucci, Antonella; Forte, Eleonora; Incitti, Ilario; Orsatti, Laura; Koch, Uwe; De Francesco, Raffaele; Olsen, David B.; Carroll, Steven S. [Reprint Author]; Migliaccio, Giovanni

CORPORATE SOURCE: Department of Biological Chemistry, Merck Research Laboratories, West Point, PA, 19486, USA
steve_carroll@merck.com; giovanni_migliaccio@merck.com

SOURCE: Journal of Virology, (January 2004) Vol. 78, No. 2, pp. 938-946. print.
ISSN: 0022-538X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 25 Feb 2004
Last Updated on STN: 25 Feb 2004

TI Characterization of the inhibition of hepatitis C virus RNA replication by nonnucleosides.

L11 ANSWER 45 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2004:102515 BIOSIS

DOCUMENT NUMBER: PREV200400104193

TITLE: Conserved C-terminal threonine of hepatitis C virus NS3
regulates autoproteolysis and prevents product inhibition.

AUTHOR(S): Wang, Wenyan; Lahser, Frederick C.; Yi, Minkyung;
Wright-Minogue, Jacquelyn; Xia, Ellen; Weber, Patricia C.;
Lemon, Stanley M.; Malcolm, Bruce A. [Reprint Author]

CORPORATE SOURCE: Department of Antiviral Therapeutics, Schering-Plough
Research Institute, 2015 Galloping Hill Rd., K-15-4945,
Kenilworth, NJ, 07033, USA
bruce.malcolm@spcorp.com

SOURCE: Journal of Virology, (January 2004) Vol. 78, No. 2, pp.
700-709. print.

ISSN: 0022-538X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 18 Feb 2004

Last Updated on STN: 18 Feb 2004

TI Conserved C-terminal threonine of hepatitis C virus NS3 regulates
autoproteolysis and prevents product inhibition.

L11 ANSWER 46 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2003:587925 BIOSIS

DOCUMENT NUMBER: PREV200300570722

TITLE: Direct interaction between alpha-actinin and hepatitis C
virus NS5B.

AUTHOR(S): Lan, Shuiyun; Wang, Hua; Jiang, Hong; Mao, Hongxia; Liu,
Xiaoying; Zhang, Xiaonan; Hu, Yunwen; Xiang, Li; Yuan,
Zhenghong [Reprint Author]

CORPORATE SOURCE: Key Laboratory of Medical Molecular Virology, Shanghai
Medical College, Fudan University, Shanghai, 200032, China
zhyuan@shmu.edu.cn

SOURCE: FEBS Letters, (20 November 2003) Vol. 554, No. 3, pp.
289-294. print.

CODEN: FEBLAL. ISSN: 0014-5793.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 10 Dec 2003

Last Updated on STN: 10 Dec 2003

TI Direct interaction between alpha-actinin and hepatitis C virus NS5B.

L11 ANSWER 47 OF 54 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation
on

STN

ACCESSION NUMBER: 2003:577604 BIOSIS

DOCUMENT NUMBER: PREV200300583408

TITLE: Hepatitis C virus NS5A and subgenomic
replicon activate NF-kappaB via tyrosine
phosphorylation of IkappaBalpha and its degradation by
calpain protease.

AUTHOR(S): Waris, Gulam; Livolsi, Antonia; Imbert, Veronique; Peyron,
Jean-Francois; Siddiqui, Aleem [Reprint Author]

CORPORATE SOURCE: Department of Microbiology and Program in Molecular
Biology, University of Colorado Health Sciences Center,
B-172, Denver, CO, 80262, USA
aleem.siddiqui@uchsc.edu

SOURCE: Journal of Biological Chemistry, (October 17 2003) Vol.
278, No. 42, pp. 40778-40787. print.
CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 10 Dec 2003

Last Updated on STN: 10 Dec 2003

TI Hepatitis C virus NS5A and subgenomic replicon
activate NF-kappaB via tyrosine phosphorylation of IkappaBalpha and its
degradation by calpain protease.

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STN

ACCESSION NUMBER: 2003:320536 BIOSIS

DOCUMENT NUMBER: PREV200300320536

TITLE: The hepatitis C virus non-structural NS5A protein inhibits
activating protein-1 function by perturbing Ras-ERK pathway
signaling.

AUTHOR(S): Macdonald, Andrew; Crowder, Katherine; Street, Andrew;
McCormick, Christopher; Saksela, Kalle; Harris, Mark
[Reprint Author]

CORPORATE SOURCE: Division of Microbiology, School of Biochemistry and
Molecular Biology, University of Leeds, Leeds, LS2 9JT, UK
mharris@bmb.leeds.ac.uk

SOURCE: Journal of Biological Chemistry, (May 16 2003) Vol. 278,
No. 20, pp. 17775-17784. print.
CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 9 Jul 2003

Last Updated on STN: 9 Jul 2003

TI The hepatitis C virus non-structural NS5A protein inhibits activating protein-1 function by perturbing Ras-ERK pathway signaling.

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on

STN

ACCESSION NUMBER: 2003:298791 BIOSIS

DOCUMENT NUMBER: PREV200300298791

TITLE: Development of a cell-based assay for monitoring specific hepatitis C virus NS3/4A protease activity in mammalian cells.

AUTHOR(S): Lee, Jin-Ching; Shih, Ya-Feng; Hsu, Sung-Po; Chang, Ten-Yuan; Chen, Lee-Hua; Hsu, John T. A. [Reprint Author]

CORPORATE SOURCE: Division of Biotechnology and Pharmaceutical Research, National Health Research Institutes, Taipei, 115, Taiwan
tsuanhsu@nhri.org.tw

SOURCE: Analytical Biochemistry, (May 15 2003) Vol. 316, No. 2, pp. 162-170. print.

ISSN: 0003-2697 (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 25 Jun 2003

Last Updated on STN: 25 Jun 2003

TI Development of a cell-based assay for monitoring specific hepatitis C virus NS3/4A protease activity in mammalian cells.

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on

STN

ACCESSION NUMBER: 2003:212227 BIOSIS

DOCUMENT NUMBER: PREV200300212227

TITLE: Interaction with a ubiquitin-like protein enhances the ubiquitination and degradation of hepatitis C virus RNA-dependent RNA polymerase.

AUTHOR(S): Gao, Lu; Tu, Hong; Shi, Stephanie T.; Lee, Ki-Jeong; Asanaka, Miyuki; Hwang, Soon B.; Lai, Michael M. C. [Reprint Author]

CORPORATE SOURCE: Department of Molecular Microbiology and Immunology, University of Southern California School of Medicine, 2011 Zonal Ave., HMR-401, Los Angeles, CA, 90033-1054, USA
michlai@hsc.usc.edu

SOURCE: Journal of Virology, (April 2003) Vol. 77, No. 7, pp. 4149-4159. print.

ISSN: 0022-538X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English
ENTRY DATE: Entered STN: 30 Apr 2003
Last Updated on STN: 30 Apr 2003
TI Interaction with a ubiquitin-like protein enhances the ubiquitination and degradation of hepatitis C virus RNA-dependent RNA polymerase.

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STN

ACCESSION NUMBER: 2003:182660 BIOSIS

DOCUMENT NUMBER: PREV200300182660

TITLE: In vitro selection and characterization of hepatitis C virus serine protease variants resistant to an active-site peptide inhibitor.

AUTHOR(S): Trozzi, Caterina; Bartholomew, Linda; Ceccacci, Alessandra; Biasiol, Gabriella; Pacini, Laura; Altamura, Sergio; Narjes, Frank; Muraglia, Ester; Paonessa, Giacomo; Koch, Uwe; De Francesco, Raffaele; Steinkuhler, Christian; Migliaccio, Giovanni [Reprint Author]

CORPORATE SOURCE: IRBM "P. Angeletti", Via Pontina Km 30.600, 00040, Pomezia,

Rome, Italy

giovanni_migliaccio@merck.com

SOURCE: Journal of Virology, (March 2003) Vol. 77, No. 6, pp. 3669-3679. print.
ISSN: 0022-538X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 9 Apr 2003

Last Updated on STN: 9 Apr 2003

TI In vitro selection and characterization of hepatitis C virus serine protease variants resistant to an active-site peptide inhibitor.

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STN

ACCESSION NUMBER: 2003:182645 BIOSIS

DOCUMENT NUMBER: PREV200300182645

TITLE: 3' Nontranslated RNA signals required for replication of hepatitis C virus RNA.

AUTHOR(S): Yi, Minkyung; Lemon, Stanley M. [Reprint Author]

CORPORATE SOURCE: Department of Microbiology and Immunology, Medical Branch

at Galveston, University of Texas, 301 University Blvd.,

Galveston, TX, 77555-1019, USA

smlemon@utmb.edu

SOURCE: Journal of Virology, (March 2003) Vol. 77, No. 6, pp.
3557-3568. print.
ISSN: 0022-538X (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Apr 2003
Last Updated on STN: 9 Apr 2003
TI 3' Nontranslated RNA signals required for replication of hepatitis C virus
RNA.

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STN
ACCESSION NUMBER: 2002:337026 BIOSIS
DOCUMENT NUMBER: PREV200200337026
TITLE: Genetic analysis of sequences in the 3' nontranslated
region of hepatitis C virus that are important for RNA
replication.
AUTHOR(S): Friebe, Peter; Bartenschlager, Ralf [Reprint author]
CORPORATE SOURCE: Abteilung Molekulare Virologie, Hygiene-Institut,
Otto-Meyerhof-Zentrum, Ruprecht-Karls-Universitaet
Heidelberg, Im Neuenheimer Feld 350, 69120, Heidelberg,
Germany
Ralf_Bartenschlager@med.uni-heidelberg.de
SOURCE: Journal of Virology, (June, 2002) Vol. 76, No. 11, pp.
5326-5338. print.
CODEN: JOVIAM. ISSN: 0022-538X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 12 Jun 2002
Last Updated on STN: 12 Jun 2002
TI Genetic analysis of sequences in the 3' nontranslated region of hepatitis
C virus that are important for RNA replication.

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STN
ACCESSION NUMBER: 2001:222240 BIOSIS
DOCUMENT NUMBER: PREV200100222240
TITLE: Interferon-alpha inhibits hepatitis C virus
subgenomic RNA replication by an MxA-independent
pathway.
AUTHOR(S): Frese, Michael; Pietschmann, Thomas; Moradpour, Darius;
Haller, Otto; Bartenschlager, Ralf [Reprint author]
CORPORATE SOURCE: Institut fuer Virologie, Universitaet Mainz, Obere
Zahlbacher Str. 67, D-55131, Mainz, Germany

bartnsch@mail.uni-mainz.de

SOURCE: Journal of General Virology, (April, 2001) Vol. 82, No. 4,
pp. 723-733. print.

CODEN: JGVIA Y. ISSN: 0022-1317.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 9 May 2001

Last Updated on STN: 18 Feb 2002

TI Interferon-alpha inhibits hepatitis C virus subgenomic RNA
replication by an MxA-independent pathway.